SIGNIFICANT LEARNING IN THE TEACHING OF ECONOMICS

Hernando Manuel Avilés Ramírez* UMECIT, Panama <u>hernandoaviles@umecit.edu.pa</u> https://orcid.org/0000-0002-4500-8677

Reception date: 12/03/2022

Revision date: 26/04/2022

DOI: 10.37594/dialogus.vi9.713 Acceptance date: 05/05/2022

ABSTRACT

This argumentative essay is based on the theoretical reflections that other authors have made about meaningful learning, reasoning at the same time how the teaching of economics could be improved in the light of the theory of meaningful learning in the classic vision of David Ausubel; as well as the contributions of Moreira, among others. In teaching practice, most didactic strategies continue to promote much more mechanical learning, purely memoristic, than meaningful learning. For this reason, it is detailed what is meaningful learning, aspects to be taken into account, arguing that to achieve meaningful learning in economics it is necessary to start from the economic reality, from the facilitating role of the teacher in the programming of the content, when selecting the potential didactic material that adjusts to the cognitive structures of the student. In the reasoning, some economic realities are addressed such as the market with monopolies, oligopolies, financial crises and how they should be presented to the student, so that he can visualize how what he learns serves him for life, in such a way that he understands, analyzes, reflects, achieves a significant critical learning and actively participates in society; Achievements that can occur with the accompaniment and guidance of the teacher, teamwork and support of the new digital tools.

Key words: learning, teaching, economics, strategies

^{*}Business Administrator from the Cooperative University of Colombia, Colombia; Economist from the University of Antioquia, Colombia; Specialist in the application of Information and Communication Technologies for teaching; *Magister in Digital Technologies Applied to Education from the University of Santander, Colombia; Doctoral Candidate in Educational Sciences with emphasis in Research, Evaluation and Formulation of Educational Projects from the Universidad Metropolitana de Educación, Ciencia y Tecnológica (UMECIT), Panama.

INTRODUCTION

This paper clarifies the concept of meaningful learning, which is opposed to learning based on memory, affirming that there is only true meaningful learning when what is to be learned is linked in a planned and non-arbitrary way, taking into account what the student already knows, in other words, with his previous knowledge in his cognitive structure, which will be important for the construction of new learning.

At the same time, it clarifies the concept of economics, and proposes a teaching of economics, starting from the economic realities that students live, where they can perceive that the economy is a social science that evolves or regresses depending on the decisions of the different economic agents.

In order to argue for meaningful learning in the teaching of economics, some initial considerations of quotations from authors regarding meaningful learning are established, reflecting on the contributions of Ausubel and Moreira, articulating with what is intended to be taught in the subject of economics, at the high school level and/or first semesters of University, what teachers should know in order to achieve meaningful learning, how to approach economic concepts and theories in an effective way, how to get students to think critically so that they can contribute to the economic welfare of society, and recommendations about the didactic material to be developed.

GENERAL CONSIDERATIONS

First, it is necessary to clarify that economics is a social science, in charge of studying how economic agents (families, companies and governments) organize the resources available to a society, which among other things are scarce, in such a way that they can produce, distribute and consume to satisfy the needs of the population.

Secondly, according to Moreira (2020), meaningful learning is understood as "*learning with understanding, with meaning, with the ability to apply, transfer, describe, explain, new knowledge*". That is to say, the student needs to know what the contents he is going to study are for, how he applies them in his life, he will be able to transfer them to other areas or knowledge, they will be so clear and recorded for a long time in his memory; in fact, in the teaching of economics at the high school level and first semesters of university, it is proposed to start with the understanding and reflection of his economic reality, to then understand the economic theories, to achieve meaningful learning.

Third, knowing the principle of Ausubel's educational psychology, "of all the factors that

influence learning, the most important is what the student already knows. Find this out, and teach accordingly" (Ausubel, 1978, p. 6). The educator must find out what his students know about the contents he intends to teach and relate them to the current context, so that he can make a connection between what they already know and future knowledge in order to reach a better understanding.

Finally, it is necessary to awaken interest in learning in young people, where the choice of methodological strategies, potentially meaningful materials are of great help, and accompanied by questions that invite reflection and activate attention; according to Renninger, et al. (2015) some studies show that "the presence of interest positively influences the learner's attention, the use of strategies and the definition of their goals... interest can be used as a support even when the person has low self-efficacy, lack of academic goals and/or is not able to self-regulate" (p. 2).

WHAT THE TEACHER SHOULD KNOW BEFORE TEACHING

In the cognitive structure of the human being there will be an interaction between previous knowledge and new knowledge taught in a meaningful way, they are progressively differentiated; but at the same time, the same is also related in order to make conciliatory integrations (Moreira, 2020).

In addition, there is organization and hierarchy in this cognitive structure "hierarchically means that some subsumers are more general, more inclusive, than others, but this hierarchy is not permanent; as the processes of progressive differentiation and integrative reconciliation occur, the cognitive structure changes" (Moreira, 2011, p. 42).

According to the above, what happens internally in the mind of each student is something complex, which the teacher must guide in an articulated and methodical way to achieve good anchorages of these subsumers, making the learner understand, feel good and predisposed to new knowledge.

To achieve this, it is important to explain the triadic relationship between teacher-student and educational materials; where dyadic relationships are derived between them; that is, between the teacher - educational material when selecting them, teacher - student to know their previous knowledge and activate their interest, educational material - student to build their new meanings and student - student to organize and hierarchize their cognitive structure and motivate themselves to be ready for new learning (Gowin, 1981). (Gowin, 1981).

In conclusion, what matters is that there is meaningful learning from teaching. "Teaching

is consummated when the meaning of the material that the learner grasps is the meaning that the teacher intends that material to have for the learner" (Gowin, 1981, p. 81). If this is not achieved, the teacher must look for new resources and didactic strategies to achieve it, otherwise they will be harmful to the aforementioned relationships and we will find unmotivated and disinterested students when it comes to receiving a class inside the classroom.

FROM CONTEXT TO CONCEPTS AND THEORY.

How to achieve meaningful learning in economics? By presenting the economic situations that arise around them, and then going to the conceptualization and later understanding of economic theories.

Most schools still continue with a traditional teaching, memoristic, repetitive, the student is passive, even reflected in classroom evaluations; partly because the world is based on concepts, the mind works on concepts, something as simple as talking about the word computer, today, the vast majority of people know that it is a digital electronic machine that executes commands, information is entered, processed and output data; however, concepts such as interest rate, are not so clear to many, so you have to conceptualize it in a meaningful way. According to (Moreira, 2020, p 42).

"But how to conceptualize? There is no other answer: in a meaningful way, no doubt. If conceptualization is, as Vergnaud says, the core of cognitive development, it makes no sense to think of conceptualizing without concepts having been internally constructed or reconstructed, without, in short, learning being meaningful. Why, then, meaningful learning? Because without it we do not conceptualize and without conceptualizing, we practically do not exist".

In this order of ideas, the student learns slowly or quickly according to his learning pace, assimilates the information to organize it in his mind, performs cognitive processes of progressive differentiation and integrative reconciliation, that is to say, meaningful learning is increasing.

For these reasons, approaching economic concepts and theories from the outset can cause confusion and apathy for learning; for example, when talking about market competition, which can be in any of the many markets that exist: labor, goods and services, financial, etc. Entering into the conceptualization of supply and demand, market equilibrium, equilibrium prices can be complex and not very entertaining for many, and even impractical considering the theoretical principles that argue it, but if we talk about monopolies and oligopolies, which is what is observed in our reality, and which are an imperfect competition, typical of non-competitive markets, the theoretical arguments of perfect competition do not fit in reality. Mentioning companies such as Apple, Amazon, Google, Coca-Cola, as references at the level of large monopolies, at the level of Colombia oligopolies such as cell phone companies (Claro, Movistar, Tigo), cement companies (Cemex, Holcim, Argos), drinking water distribution companies (Coca-Cola, Postobón, Aje) will serve as references to capture the interest, know the previous knowledge, diagnose knowledge, in order to make a real meaningful planning of the contents to be taught.

SIGNIFICANT CRITICAL LEARNING IN ECONOMICS

Economics teachers have a commitment to society, since the economic success of a society lies largely on good financial decisions and planning of economic agents, for this it is not enough to know concepts, topics, even meanings, it is necessary to teach to reflect and think critically; in other words, a significant critical learning in economics. "*Critical significant learning is that perspective that allows the subject to be part of his culture and, at the same time, to be outside of it*" (Moreira, 2005, p. 18).

Meanings are subject to a determined and circumstantial environment, which can be refuted, because there are no absolute truths in many situations of economics, it must be remembered that economics is a social science and that it is derived from the relationships between people in terms of production, distribution and consumption of goods and services, and as such it is not exact; in addition, the theories that are taught both in schools and universities, their roots are from books from the United States and Europe, which often do not apply to our context.

Students must be taught to ask questions scientifically, to doubt, to investigate what they hear, listen to, observe, so that in addition to building their significant learning, they can be citizens committed to the economy and politics of the country, voters, consumers, workers and investors, who help to pull the economy in its times of expansion and boom, as well as to know how to responsibly face times of crisis, through a rational use of resources.

Talking in economics whether an economic system or economic model is good or not for a society, are questions that require analysis, argumentation and reflection by the student and that lead to activate critical thinking in him/her; hence, the contents and methodology must be well articulated to achieve significant critical learning. According to Ongeri (2009) critical thinking, the use of theories applied to economic realities motivates the student to understand the strengths of the economic model, but also its weaknesses. In this way, a commitment of the learner to social progress is achieved, in a perspective of justice and equity.

ROLE OF TEACHING MATERIALS

Let us remember that the didactic material must be potentially significant for a true meaningful learning to take place, regardless of the choice made, books, documents, internet pages, case studies, among others; what is relevant is that they are well organized, logically structured with the student's previous knowledge in order to be able to be led to new knowledge.

In economics, the tools of concept and mental maps are of valuable support to help form the cognitive structure required for an efficient cognitive process when reading about economics; also, with case studies, certain topics can be linked so that the young learner can demonstrate their application in practical life.

Talk for example about financial bubbles (which occur when the price of certain assets rise abnormally and continuously over time, far from their real value in productive terms) and teach them that this is how the great financial crises have originated worldwide, such as the Crack of 1929, the financial crisis of 1997, where the common factor was the fall in stock prices as an effect of the bubble that had been generated; the mortgage crisis in the United States, where the overvaluation of real estate assets, coupled with low interest rates for customers with high risk of default who borrowed to buy housing, unleashed a worldwide reduction in credit; they will understand that the financial system depends on the real sector in the economy, and the importance of gross domestic product as an indicator of economic growth.

To raise a reflection, taking into account situations such as the container crisis in China, the war between Russia and Ukraine, the economic recession in the United States, among others, will a financial bubble be forming? Will the cryptocurrencies that have been falling in price enter the market? Considering these types of questions will certainly encourage enthusiasm for the subject, fostering their investigative, analytical and critical capacity.

Now, another important tool to work with the new digital natives are the information and communication technologies (ICT) which are potentially significant, since they feel identified with everything related to digital technology: the Internet, forums, wikis, educational App, social networks, video tutorials, simulators, etc; that associated with teamwork and case studies will be highly profitable and fruitful. In this regard, Marqués (1999) states that ICTs promote and maintain interest, motivation and interaction through work and discussion groups.

Therefore, ICT are undoubtedly a support to achieve meaningful learning, by maintaining

interest, motivation allowing the student to self-regulate in their learning process, according to Renninger et al., (2015), "self-regulation refers to the process in which students systematically focus their thoughts, feelings and actions to achieve learning goals" (p. 116).

As for simulators that can collaborate with meaningful learning is Sim City, whose objective is for the student to build and manage the city, assuming the role of mayor, manage its budget to meet the needs of its population, achieving a cross-cutting approach to different areas such as science, mathematics, technology, citizenship, economics, conflict resolution and politics, among others.

Another interesting simulator is called Economy, which takes advantage of the macroeconomics that has been developed by the European Central Bank, with the aim that the student, in a didactic way, understands the fundamental aspects of the Monetary Policy and the functioning of the monetary policy of the Euro Zone. The student will assume the role of the president of the European Central Bank and, with the collaboration of advisors, must maintain inflation at a low and stable level of 2%. He will have the option of having information on the rise or fall of interest rates, information from the press, graphs and expert opinions.

In contrast to the current traditional environment of an economics class that the vast majority of schools and universities in Latin American countries are concerned with definitions and little meaningful learning, an academic scenario with the use of simulators in economics class, would strengthen the cognitive conceptual structure that is being developed with the learner, would encourage the triadic relationship of teacher, student and educational material, a process that by being student-centered favors the connection of prior knowledge with the new one.

Finally, it must be said that the teacher must be trained to know well the didactic materials with which he/she wishes to work and even more with the programming of the content, so that the conceptual structure of the contents is articulated as well as possible to the cognitive structure of the students. According to Moreira (2020) *"The facilitation of meaningful learning depends much more on a new teaching posture, on a new school guideline, than on new methodologies, including modern information and communication technologies"* (p.48).

CONCLUSIONS

Meaningful learning has been talked about for many years, and it seems that the theories are not applied, in schools memory, procedures and repetitive work still predominate, and there is a lack of a good diagnosis of the student's knowledge in order to carry out a good planning, involving the student's previous cognitive structure with the conceptual structures to be taught.

What is relevant is the teacher's posture and attitude towards the way he/she wants to teach, his/her effort to methodologically organize the contents according to his/her students, it is important to make it clear to the student what the contents will be useful for in life, to make him/her think and reflect on his/her context.

In addition, prior knowledge in the subject of economics and predisposition to learn is essential, so a good motivation of the teacher is essential to capture their interest and attention, as well as digital tools such as wikis, forums, social networks, simulators, etc., can promote self-regulation of the learner.

BIBLIOGRAPHIC REFERENCES

- Ausubel, D. P. (1978). Psicología Educativa: Un Punto de Vista Cognoscitivo. Editorial Trillas, S. A.
- Gowin, D. B. (1981). Educating. Cornell University Press.
- Marqués, P. (1999). Diseño Y Educación De Programas Educativos. https://cursos. clavijero.edu.mx/cursos/159_dmem/modulo5/documentos/Dise%C3%B10%20y%20 evaluaci%C3%B3n%20de%20programas%20educativos.pdf
- Moreira, Marco Antonio. (2020). Aprendizaje Significativo: La isión clásica, otras visiones e interés. Proyecciones Universidad Nacional de La Plata, Argentina ISSN: 1850-6242.
- Moreira, M. A. (2011). Aprendizagem Significativa: A Teoria e Textos Complementares. Livraria Editora da Física.
- Moreira, M. A. (2005). Aprendizagem Significativa Crítica. Instituto de Física da UFRGS.
- Ongeri, Joseph D. (2009). "Poor Student Evaluation of Teaching in Economics: A Critical Survey of The Literature", Australasian Journal of Economics Education, Vol. 6, No. 2, pp.1-24
- Renninger, K. A., Nieswandt, M. y Hidi, S. (Eds.) (2015). Interest in Mathematics and Science Learning. American Educational Research Association.